



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,412	12/20/2001	Goh Matsubara	914-148	4918

23117 7590 03/21/2006

NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

EXAMINER

POWERS, WILLIAM S

ART UNIT PAPER NUMBER

2134

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/022,412

Applicant(s)

MATSUBARA ET AL.

Examiner

William S. Powers

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10/022,412.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The indicated allowability of claims 2, 3, 4, 6, 7, 9 and 10 is withdrawn in view of the newly discovered reference(s) to deMuro, Green and Schneier. Rejections based on the newly cited reference(s) follow.

Claim Objections

2. Claims 8-10 are objected to because of the following informalities: Applicant recites, "a predetermined voltage set unit" in each of the aforementioned claims. There is only one voltage set unit mentioned in the specification. For purposes of examination, the Examiner assumes that it is not the voltage set unit that is predetermined, but the operating voltages of the game cartridge. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2134

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 2, 3, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,715,169 to Noguchi in view of US Patent No. 6,114,836 to Hagiwara et al. (hereto referred to as Hagiwara) in further view of International Patent Application No. WO 99/00863 to deMuro.

As to claim 2, Noguchi teaches:

- a. An accumulation unit accumulating power (column 5, lines 62-65).

- b. A discharge unit causing discharge of said accumulation unit (time expiration unit) (column 5, lines 41-45).
- c. A measurement unit measuring voltage of said accumulation unit (power source monitor) (column 10, lines 3-10).
- d. Accumulation unit is chargeable by being connected to a power supply apparatus that supplies power to said accumulation unit (column 6, lines 1-5).

Noguchi does not expressly mention controlling access to content through voltage measurement. However, in an analogous art, Hagiwara teaches a control unit controlling reproduction of said content based on a value of voltage measured by said measurement unit (a power source controller that uses a discharger and voltmeter to manage and monitor the battery unit for a portable electronic apparatus) (column 9, lines 15-20).

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to implement the game rental cartridge of Noguchi with the discharger and voltmeter of Hagiwara in order to control the operation of the electronic apparatus and prevent loss of data due to a power outage as suggested by Hagiwara (column 1, lines 45-65).

Neither Noguchi nor Hagiwara expressly mention authentication of the battery charging apparatus before the recharging of the battery. However, in an analogous art, deMuro teaches control unit comprises an authentication unit conducting authentication of said power supply apparatus, and a charge permit unit permitting charging of said

Art Unit: 2134

accumulation unit when authentication at said authentication unit is successful. (WO 99/00863 page 3, lines 11-27).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the game rental cartridge with a discharger and voltmeter of Noguchi and Hagiwara with the authentication scheme of deMuro in order safely charge a rechargeable battery as suggested by deMuro (page 1, lines 8-32).

As to claim 3, deMuro teaches a predetermined charge key is stored in said recording medium, said authentication unit conducting said authentication using said charge key (an authentication code that authenticates the charger) (page 3, lines 11-27).

As to claim 5, Noguchi teaches:

a. A control unit controlling charging of the accumulation unit of said recording medium (column 3, lines 31-35 and column 4, lines 36-41)

b. An usage expiration term set unit setting a usage expiration term of content recorded in said recording medium (setting a counter in said software rental cartridge that stores the length of the rental contract) (column 4, line 66-column 5, line 8).

As to claim 6, Hagiwara teaches a modify unit modifying an amount of discharge at a discharge unit of said recording medium (switching from battery power to AC power upon detection of low battery voltage) (Hagiwara, column 12, lines 33-39).

Noguchi teaches a set unit setting a usage expiration term of the content recorded into said recording medium (setting a counter in said software rental cartridge that stores the length of the rental contract) (column 4, line 66-column 5, line 8).

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,715,169 to Noguchi in view of US Patent No. 6,114,836 to Hagiwara et al. (hereto referred to as Hagiwara) in further view of International Patent Application No. WO 99/00863 to deMuro as applied to claims 2 and 3 above and further in view of US Patent No. 5,768,382 to Schneier et al. (hereinafter Schneier).

As to claim 4, Noguchi, Hagiwara and deMuro do not expressly mention the use of a one-time authentication code. However, in an analogous art, Schneier teaches an authentication unit erases said charge key when said authentication is successful ("one-time usage, i.e., an authenticatable start message may only be used once") (column 47 lines 49-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the game rental cartridge with a discharger and voltmeter and authentication scheme of Noguchi, Hagiwara and deMuro with the

Art Unit: 2134

one-time authentication method of Schneier in order to ensure the validity of the scores from a computerized test or game as suggested by Schneier (column 1, lines 9-35).

8. Claims 7-12 rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,715,169 to Noguchi, as applied to claim 2 above, in view of US Patent 4,769,765 to Green.

As to claim 7, Noguchi does not expressly mention the cutting off the power to the cartridge to make it the content inaccessible after the rental term has expired. However, in an analogous art, Green teaches a control unit of said recording medium to alter a voltage value of the accumulation unit controlling reproduction of content, whereby a usage expiration term of the content recorded in said recording medium is set (disabling a device through the interruption of the power supply once a rental term has expired) (column 2, lines 30-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the game rental cartridge with a discharger and voltmeter and authentication scheme of Noguchi, Hagiwara and deMuro with the power supply interruption of Green in order to control the use of rented equipment as suggested by Green (column 2, lines 10-26).

As to claim 8, Green teaches a control unit that includes a predetermined voltage set unit setting a first voltage value charged at said accumulation unit, and a

Art Unit: 2134

predetermined second voltage value that disables reproduction of said content, wherein reproduction of said content is controlled based on said first and second voltage values (the invention of Green allows for normal operation of equipment during the rental contract. Once the contract has expired, the voltage is changed to zero so that the equipment will no longer function.) (column 2, lines 30-56).

As to claim 9, Green teaches a voltage set unit alters said first voltage value (power supply line is interrupted resulting in a voltage of zero) (column 2, lines 30-43).

As to claim 10, Green teaches voltage set unit alters said second voltage value (power supply line is connected to supply voltage to make the equipment usable) (column 3, lines 46-54).

As to claim 11, Hagiwara teaches a discharge amount control unit controlling an amount of discharge of said discharge unit the use of a power source controller that controls the charging and discharging of the battery in order to detect the low-battery state (column 8, lines 19-22).

As to claim 12, Noguchi teaches an accumulation unit that is a secondary battery (column 5, lines 62-67).

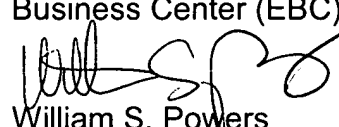
Art Unit: 2134

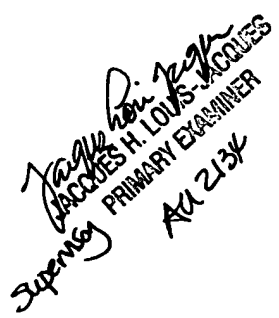
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William S. Powers whose telephone number is 751 272 8573. The examiner can normally be reached on m-f 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 571 272 3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


William S. Powers
Examiner
Art Unit 2134


JACQUES H. LOUIS-MOISES
PRIMARY EXAMINER
ACU 2134
Supervising